

**A DESCRIPTION OF A TOPOTYPIC MALE OF
AEDES SCUTELLARIS (WALKER)
(DIPTERA: CULICIDAE)**

YIAU-MIN HUANG

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**A DESCRIPTION OF A TOPOTYPIC MALE OF
AEDES SCUTELLARIS (WALKER)**

(DIPTERA: CULICIDAE)^{1, 2}

YIAU-MIN HUANG, *Southeast Asia Mosquito Project, Department of
Entomology, Smithsonian Institution, Washington, D. C. 20560*

ABSTRACT—A topotypic male of *Aedes scutellaris* (Walker) from Aroe Islands is described and illustrated.

The name *Aedes scutellaris* (Walker) 1859 has caused considerable confusion and has often been misused. Walker placed the species in the genus *Culex* L. and said he was describing the male, but the specimen marked holotype in the British Museum is a female. The original description applies equally well to a male or a female as no sexual characters were mentioned.

Stone (1947) described a topotypic male terminalia of *scutellaris* (Walker) for the first time. This specimen unfortunately was completely destroyed in transit as indicated by him. Belkin (1962) gave a description and a drawing of the claspette of this same topotypic male terminalia.

Through the kindness of Dr. P. F. Mattingly, I have had the opportunity to examine type and other material of *Stegomyia* mosquitoes in the British Museum (Natural History). Among specimens from the Amsterdam collection I found a male labeled #2529 which according to the field data was collected by Brug and de Rook in the Aroe Islands, the type locality of *scutellaris* (Walker). This male bears the same data as Stone's (1947) topotypic male specimen and since the terminalia of the two specimens are identical I take advantage of this opportunity to give a full description of a topotypic male so that the identity of Walker's *scutellaris* should no longer remain in doubt.

In the British Museum, the type female of *scutellaris* (Walker) 1859 from Aru (Aroe) Islands and the type female of *zonatipes* (Walker) 1861 from Dorey, New Guinea are in very bad condition. A

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detailed study of material of all stages from the respective type localities would be necessary before the true relationship between these two can be determined. However, *scutellaris* of Walker does not appear to occur in the Southeast Asia area. No specimen resembling this form has been found by the author among a very large amount of material from many localities examined so far and the species so far reported from Bangkok and elsewhere in this area are probably *malayensis* Colless.

The members of *scutellaris* subgroup in Southeast Asia are being investigated further and the full results will be published in due course. There is a great deal of variation in the immature stages and in adult ornamentation. A large amount of individual rearing material as well as progeny rearing from a single female would be necessary to solve the taxonomic status of the members of this highly variable species group.

***Aedes (Stegomyia) scutellaris* (Walker)**
(Figs. 1, 2)

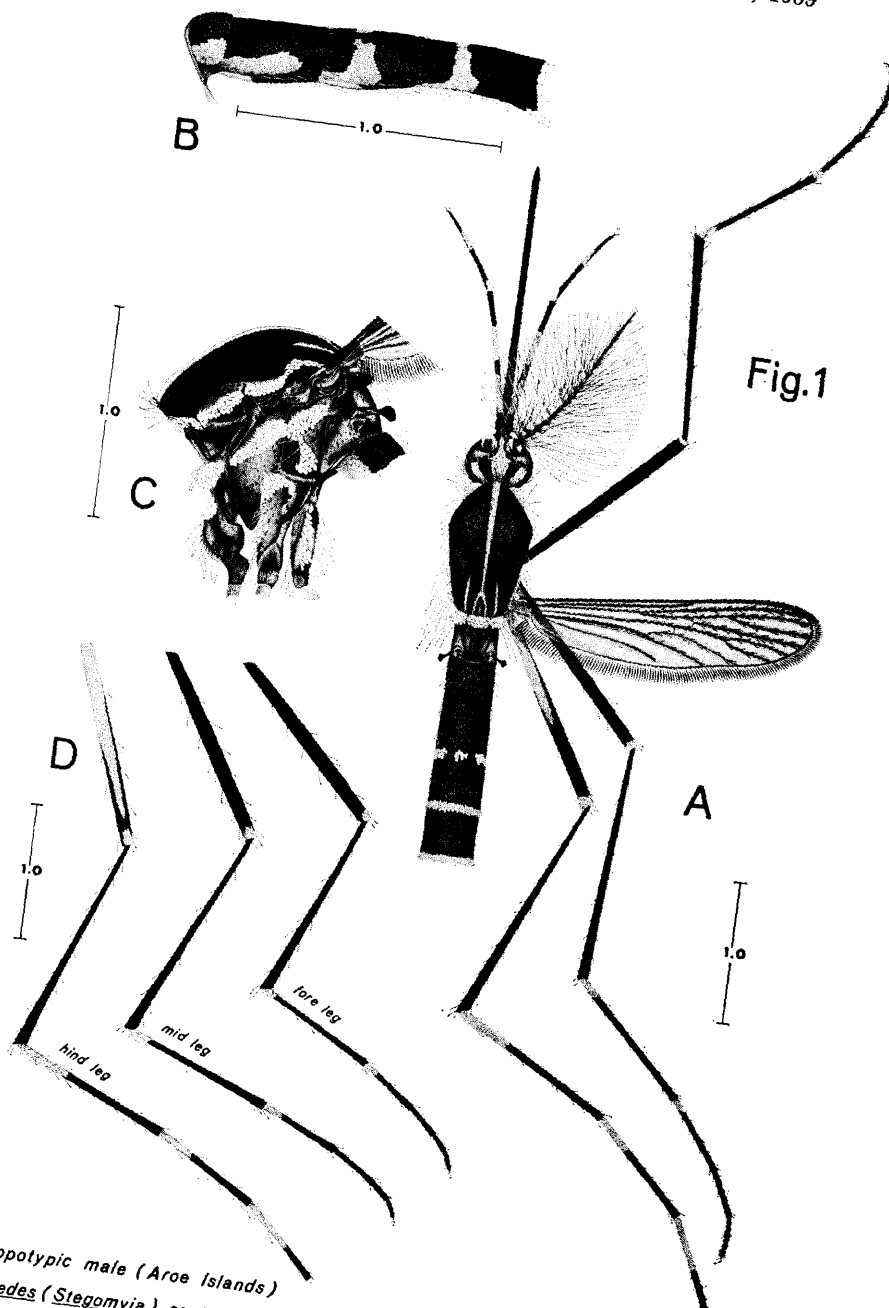
Culex scutellaris Walker, 1859, Proc. Linn. Soc. Lond. 3:77 (♂; *Culex*). Type locality: Aru Islands (Aroe).

Topotypic male (#2529) with associated terminalia slide (YMH-68-7), Dobo, Aroe Islands, 23.I.1932 (Brug and de Rook collectors). Deposited in the British Museum.

Head. Proboscis dark scaled, as long as fore femur; palpus dark, as long as proboscis, with a white basal band on each of segments 2-5; those on segments 4,5 incomplete dorsally; segments 4,5 subequal, slender, upturned, and with only a few short hairs; antenna plumose, slightly shorter than proboscis; clypeus bare; torus covered with white scales except on dorsal side; decumbent scales of vertex all broad and flat; erect forked scales dark, not numerous, restricted to occiput; vertex with a median stripe of broad white scales, with broad dark scales on each side interrupted by a lateral stripe of broad white scales followed by a patch of white broad ones ventrally. *Thorax.* Scutum with narrow dark scales and a prominent median longitudinal stripe of similar white ones, the median stripe narrows slightly posteriorly and forks at beginning of the prescutellar space, there is on each side a posterior dorsocentral white line which does not reach to the middle of the scutum; the supraalar line of broad white scales present; acrostichal bristles absent; dorsocentral bristles present; scutellum with broad white scales on all lobes and with a few broad dark ones at the apex of mid lobe; anterior pronotum with broad white scales; posterior pronotum with narrow dark scales on the upper portion and with broad white scales on the lower portion

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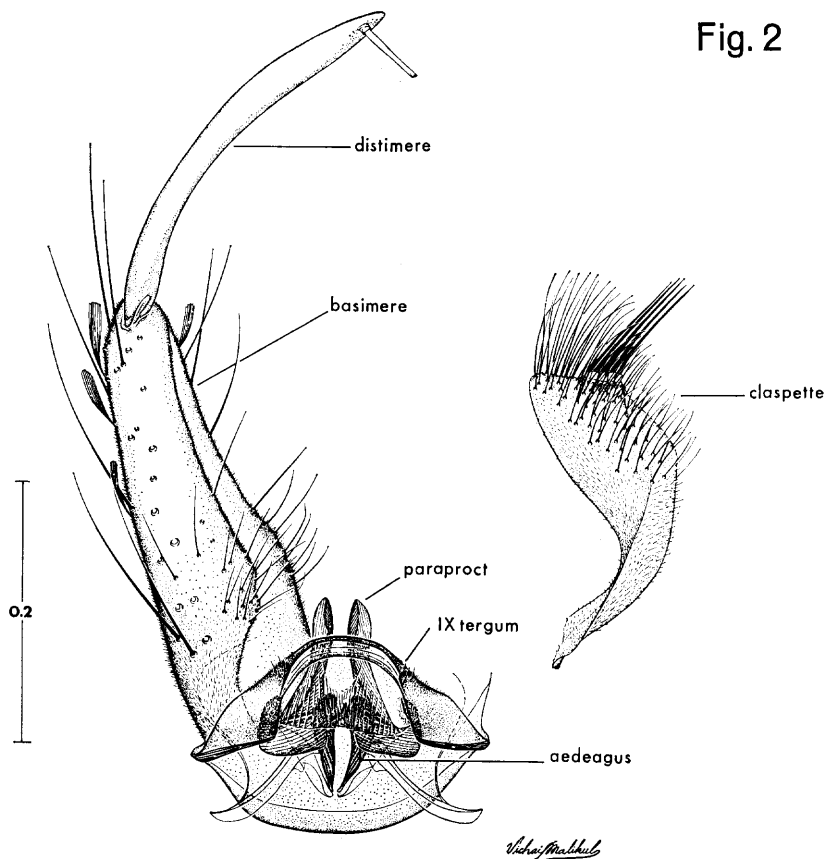
Fig. 1. *Aedes (Stegomyia) scutellaris* (Walker): A, dorsal aspect of the topotypic male; B, lateral aspect of the topotypic male abdomen; C, lateral aspect of the topotypic male thorax; D, anterior surface of the topotypic male legs.



Topotypic male (Aroe Islands)
Aedes (Stegomyia) scutellaris (Walker)

Robert M. Anderson

Fig. 2



Aedes (Stegomyia) scutellaris (Walker)

Fig. 2. *Aedes (Stegomyia) scutellaris* (Walker): tergal aspect of the topotypic male terminalia with claspette enlarged.

forming a white stripe instead of white patch; paratergite with broad white scales; postspiracular area without scales; subspiracular area without scales; patches of broad white scales on propleuron, on the upper and lower portions of sternopleuron, and on the upper and lower portions of mesepimeron; mesepimeron scale patches narrowly connected; lower mesepimeron without bristles; metameron bare. *Wing*. Wing with dark scales on all veins except for a minute basal spot of white scales on the costa. Halter with dark scales. *Legs*. Coxae with patches of white scales; knee-spots present on all femora; fore and mid femora dark anteriorly, paler posteriorly; hind femur anteriorly with a broad white longitudinal stripe which widens at base and is narrowly separated from the apical white scale patch; fore and mid tibiae dark anteriorly, paler posteriorly; hind tibia dark; fore and mid tarsi with basal white bands on tarsomere 1,2; hind tarsus with basal white bands on tarsomere 1-3; the rest of the tarsomeres are missing;

fore and mid legs with tarsal claws unequal, the larger one toothed, the smaller one simple. *Abdomen*. Abdominal segment I with white scales on laterotergite; tergum II dark dorsally, with lateral spots only; tergum III with a subbasal median spot and with lateral spots which are turned dorsomesally; terga IV, V each with a subbasal transverse white band which is connected to the lateral spots. *Terminalia*. Basimere 3.5 times as long as wide; its scales restricted to dorsolateral, lateral and ventral areas; with a patch of hairs on the basomesal area of the dorsal surface; mesal surface membranous; claspette truncate, with a 90 degree apicosternal angle and with 5 or 6 modified setae close to the apicosternal angle area; distimere simple, elongate, as long as basimere, with a spiniform process and a few hairs at apex; aedeagus with a distinct sclerotized lateral toothed plate on each side; paraprocts without teeth; cercal setae absent; ninth tergum with middle rounded and with 2 hairy indistinct lateral tergal lobes.

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